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(54) ADJUSTMENT SYSTEM FOR STRAPS ON **SNOWBOARD BINDINGS**

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(56)References Cited

U.S. PATENT DOCUMENTS

9/1992 Shaanan et al. 280/607 5,758,895 A * 6/1998 Bumgarner 280/607 (Continued)

FOREIGN PATENT DOCUMENTS

5877 U1 DE 20 2005 019273 U1 3/2006 (Continued)

OTHER PUBLICATIONS

International Search Report for corresponding International Patent Application No. PCT/EP2013/051371 mailed Apr. 17, 2013.

(Continued)

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ABSTRACT (57)

The invention consist of a tool-less system applied for adjusting the wrist-strap and the toe-strap on snowboard bindings, where such tool-less system is made up with the combination of 3 elements, 1. It is tool-less so the attachment position of the binding strap can be unlocked from one position on the binding frame and locked into another position fairly easily with bare hands 2. It has a stable locking mechanism based on a profiled press-button/pin element fitting into at least one hole with profiled shape provided in the frame of the binding where also at least one hole provided in the strap(s) will fit in and be securely locked in when the button element is put in place 3. The press-button element is put in place from the inside and prevented from popping out during use also by the boot which blocks the only exit direction for the button element, which is inwards. The wrist-strap will further be prevented from popping out by the highback, which during riding covers the button element holding the wrist-strap in place. The toe-strap may further be prevented from popping out by the base-plate.

15 Claims, 6 Drawing Sheets

